aligning an upper portion of the second tubular with the area of increased inside diameter of the housing; and

expanding the upper portion of the second tubular by placing a radially expansive force upon an inner wall thereof, until the second tubular is in frictional contact with the area of increased inside diameter of the housing and the outer diameter of the housing is not substantially expanded.

REMARKS

Applicants submit this amendment for consideration prior to action on the pending claims. Applicants have amended the specification to correct typing errors. Additionally, the Applicants have amended the claims to more clearly recite aspects of the invention. Applicants submit that the amendments are fully supported by the specification.

Respectfully submitted,

William B. Patterson
Registration No. 34,102
THOMASON, MOSER & PATTERSON, L.L.P.
3040 Post Oak Blvd., Suite 1500
Houston, Texas 77056
713/623-4844
Attorney for Applicant

APPENDIX

IN THE SPECIFICATION:

Please replace the paragraph at page 2, line 23 to pg. 3 line 2 with the following paragraph:

To save time and money, apparatus to facilitate cementing are often lowered into the borehole along with a pipe to be cemented. Cementing apparatus typically includes a number of different components made up at the surface prior to run-in. These include a tapered nose portion located at the downhole end of the pipe to facilitate insertion thereof into the borehole. A check valve at least partially seals the end of the tubular and prevents entry of well fluid during run-in while permitting cement to subsequently flow outwards. The same valve or another valve or plug typically located in a baffle collar above the cementing tool prevents the cement [and the annulus] from back flowing into the pipe. Components of the cementing apparatus are made of fiberglass, plastic, or other disposable material, that, like cement remaining in the pipe, can be drilled when the cementing is complete and the borehole is drilled to a new depth.

Please replace the paragraph at page 5, line 21 to pg. 6 line 8 with the following paragraph:

Figure 1 is a section view of a cement shoe assembly 100 of the present invention. The assembly 100 is typically disposed at the end of a string of tubulars that [are] is run into a well and cemented therein to isolate the wellbore from the formation therearound. The assembly 100 is preferably connected to a tubular 101 by a threaded connection 102 formed therebetween. The cement shoe assembly 100 includes a housing 110 and a drillable shoe portion 120 disposed within the housing. The drillable shoe portion 120 includes a longitudinal bore 123 extending through the center of the cement shoe and providing a fluid path for cement and well fluids. At an upper end, the bore 123 communicates with the tubular 101. Therebelow, a biased, one way valve 150 is disposed in the bore 123 permitting fluid to enter from the well surface but preventing well fluids from passing from the wellbore into tubular 101. In the embodiment shown, a spring 151 biases the valve 150 in a closed position. Adjacent valve 150, an annular area 121 defined between the bore and the housing 110 is filled with concrete to stabilize the bore 123. The

housing 110 surrounding the concrete is equipped with upsets 152 to hold the concrete in place and prevent axial movement thereof. Lining the bore 123 between the valve 150 and a conical nose portion 130 is a tubular member 131. Adjacent the tubular member 131, an annular area 132 between the tubular member and the housing 110 is filled with sand or some other aggregate. The purpose of the sand is to support the tubular member 131 in the center of the bore 123 and to prevent migration of cement from the bore 123 to the well of the housing 110 through pressure equalization ports 139 formed in tubular member 131.

Please replace the paragraph at page 6, lines 9-23 with the following paragraph:

At a lower end of the assembly 100 is conical nose portion 130. The conical nose portion serves to direct fluid into and out of the assembly 100. Additionally, the offset, conical shape of the nose portion 130 aids in run-in of the assembly by facilitating the passage of the assembly 100 through the borehole. The construction and the shape of nose portion 130 is illustrated in detail in Figure 2, an enlarged, section view thereof. At an upper end 136 the nose portion fits into housing 110 and is attached thereto with a threaded connection 134. A central bore 143 of the nose portion 130 is aligned with longitudinal bore 123 of the shoe portion 120. The nose portion 130 also includes at least one side port 133 for the passage of cement from the longitudinal bore 123 to the borehole (not shown). The nose portion 130 is constructed of drillable material having wear resistant, drillable characteristics. Fiberglass or some other composite material is typically used to form the conical nose portion 130. Located at an outer edge of the nose portion 130, at a point where the nose portion meets the edge of the housing 110, is a groove 171 formed around the perimeter nose portion. The groove 171 is constructed and arranged to ensure that the lower nose portion 135 falls away from the housing 110 as the shoe portion 120 and the upper nose portion 136 is drilled in the wellbore as will be described herein.

Please replace the paragraph at page 8, line 28 to pg. 9 line 17 with the following paragraph:

The expansion tool 400 operates with pressurized fluid supplied through run-in string 406. The expansion tool 400 includes a body 402 which is hollow and

generally tubular with a connector 404 for connection to the run-in string 406. The body 402 includes at least two recesses 414 to hold a respective roller 416. Each of the mutually identical rollers 416 is near-cylindrical and slightly barreled. Each of the rollers 416 is mounted by means of a bearing (not shown) at each end of the respective roller for rotation about a respective rotation axis which is parallel to the longitudinal axis of the expansion tool 400 and radially offset therefrom. The inner end of a piston (not shown) [420] is exposed to the pressure of fluid within the hollow core of the tool 400 and the pistons serve to actuate or urge the rollers 416 against the inside wall of a tubular therearound. In Figure 4, the expansion tool 400 is shown in an actuated position and is expanding the diameter of a tubular into a bore defined by the larger inside diameter area 160 of housing 110. Typically, the expansion tool 400 rotates as the rollers are actuated and the tool is urged upwards in the wellbore. In this manner, the expansion tool can be used to enlarge the diameter of a tubular circumferentially to a uniform size and to a predetermined length in the wellbore. Figure 5 illustrates a completed connection between the enlarged diameter area 160 of housing 110 and the tubular [455] 420. As illustrated, the inside and outside diameter of the tubular [455] 420 has been increased as the tubular is expanded past its elastic limits. However, the enlarged inside diameter area 160 of housing 110 has not expanded in diameter. In this manner, the tubular 420 is successfully affixed to the housing 110 without expanding the diameter of the housing. Additionally, the inside diameter of the housing 110 and the tubular 420 are substantially the same.

Please replace the paragraph at page 9, lines 18-25 with the following paragraph:

The connection arrangement disclosed herein and shown in Figures 4 and 5 is not limited to use with a cement shoe assembly and can be used to join tubulars at any location downhole when a connection between tubulars is desired without expanding the outer diameter of the larger tubular. For example, the apparatus and method can be utilized anytime cement, formations or any other material surrounding the outer tubular make it difficult or impossible to use an expansion technique requiring the expansion of the larger tubular. Additionally, the methods and [appartus] apparatus disclosed and claimed herein can be used in any well and are not necessarily limited to use in a hydrocarbon well.

IN THE CLAIMS:

1. A cement shoe assembly for use in a wellbore comprising:

a tubular housing for disposal at [the] an end of a tubular string, the housing having an enlarged inner diameter portion; and

a drillable cement shoe portion disposed in the housing, the cement shoe portion in selective fluid communication with a tubular thereabove.

11. A method of connecting a first tubular to a second tubular in a wellbore, the method comprising:

providing a cement shoe assembly having a housing and drillable cement shoe, the assembly disposed at a lower end of a first tubular string;

cementing the housing in the wellbore by injecting cement into an annular area defined by the housing and the borehole therearound;

drilling the cement shoe to leave only the housing thereof, the housing having an area of increased inside diameter at a lower end thereof;

[cementing the housing in the wellbore by injecting cement into an annular area defined by the housing and the borehole therearound;]

aligning an upper portion of the second tubular with the area of increased inside diameter of the housing; and

expanding the upper portion of the second tubular by placing a radially expansive force upon an inner wall thereof, until the second tubular is in frictional contact with the area of increased inside diameter of the housing and the outer diameter of the housing is not substantially expanded.